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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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PARK, VAUGHAN & FLEMING LLP
508 SECOND STREET
SUITE 201
DAVIS, CA 95616

EXAMINER

LEROUX, ETIENNE PIERRE

ART UNIT PAPER NUMBER

2171

DATE MAILED: 04/27/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

JK

Office Action Summary

Application No.

09/760,137

Applicant(s)

LANE, ROBERT M.

Examiner

Etienne P LeRoux

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-14 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-14 and 17-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 9-13 and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 5,179,702 issued to Spix et al (hereafter Spix).

Claims 1, 9 and 17:

Spix discloses a method for using empirical measurements of accesses to synchronization points within an application to construct a performance model for the application [col 8, lines 10-31], comprising:

- modifying the application to record statistics related to the synchronization points within the application wherein the statistics include a directed call graph specifying an ordering of function calls [Fig 27b, col 45, line 62 through col 46, line 2]
- running the application to produce the statistics related to synchronization points [col 42, lines 38-51]
- constructing the performance model based upon the statistics wherein the performance model is a queuing system model [col 9, lines 1-27] wherein constructing the performance model involves constructing a queuing model, wherein each synchronization point is a service center for jobs representing processes that circulate between service centers in a manner specified by the directed call graph

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□ using the performance model to predict a performance of the application [optimizer 2704, Fig 25a, col 44, line 57 through col 45, line 30]

Claims 2, 10 and 18:

Spix discloses wherein using the performance model to predict the performance involves numerically solving the analytic model to predict the performance for the application and wherein using the performance model to predict the performance involves numerically solving the analytic model to predict performance for the application [col 39, line 62 through col 40, line 13].

Claims 3, 11 and 19:

Spix discloses wherein constructing the performance model based upon the statistics involves constructing a simulation model for the application; and wherein using the performance model to predict the performance involves running the simulation model to predict the performance for the application [abstract]

Claims 4, 12 and 21:

Spix discloses wherein modifying the application involves compiling the application with a profiling option in order to record the statistics related to the synchronization points [col 51, lines 19-38]

Claims 5, 13 and 21:

Spix discloses wherein modifying the application involves modifying the executable code of the application to record the statistics during system calls that operate on the synchronization points [col 54, lines 19-40]

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 14 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spix in view of US Pat No 5,940,827 issued to Hapner et al (hereafter Hapner).

Claims 6, 14 and 22:

Spix discloses the elements of claims 1, 9 and 17 as noted above.

Furthermore, Spix discloses an identifier for a calling function [col 51, lines 19-47];

Spix fails to disclose an identifier for a mutual exclusion variable; a time spent holding the mutual exclusion variable and frequency of accesses to the mutual exclusion variable.

Hapner discloses an identifier for a mutual exclusion variable; a time spent holding the mutual exclusion variable and frequency of accesses to the mutual exclusion variable [Fig 7 and col 12, lines 10-30].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Spix to include an identifier for a mutual exclusion variable; a time spent holding the mutual exclusion variable and frequency of accesses to the mutual exclusion variable as taught by Hapner.

The ordinarily skilled artisan would have been motivated to modify Spix per the above for the purpose of providing multiple client access to a single database [Hapner, abstract]

Response to Arguments

Applicant's arguments filed 3/18/2004 have been fully considered but are moot based on supra new grounds of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

1) US Pat No. 6,530,079 issued to Choi et al discloses a method for accessing objects controlled by mutual exclusion locks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne LeRoux whose telephone number is (703) 305-0620. The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Etienne LeRoux

4/20/2004

